

What is claimed is:

1. An information server system which comprises a server device transmitting information in response to a request, and at least one client device being connected to said server device and sending a request for transmission of information to said server device,  
5 wherein:

said server device includes

schedule management means for managing relevance between classifications of information and transmission times of the information,

request receiving means for receiving, from said client device, a request for  
10 transmission of information,

request processing means for processing the request received by said request receiving means,

information providing means for referring to said schedule management means, and for selecting classified information corresponding to a present time, and also  
15 for providing the selected information, and

information sending means for sending, through the network, the information provided by said information providing means to a predetermined client device whose request has been processed by said request processing means; and

said at least one client device includes

20 request sending means for sending a request for transmission of information to said server device through the network;

information receiving means for receiving the information sent from said information sending means through the network; and

information outputting means for outputting the information received by said  
25 information receiving means.

2. The information server system according to claim 1, wherein:

said schedule management means further manages relevance between information

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representing areas and time zones of the respective areas;

said request processing means includes area determination means for determining in which area at least one client device having sent a request for transmission of information exists; and

- 5        said information providing means selects and provides classified information in accordance with a present time in a time zone of the area which is determined by said request processing means.

3.        The information server system according to claim 1, wherein:

- said server device further includes schedule information sending means for sending  
10    schedule information representing relevance between classifications of information and transmission times of the information to said at least one client device through the network;

said at least one client device further includes

- schedule information receiving means for receiving schedule information sent  
15    from said schedule information sending means through the network, and  
request inputting means for inputting a request for transmission of information from said server device, in accordance with the schedule information received by said schedule information receiving means; and  
said request sending means for sending a request for transmission of information to  
20    said server device based on an input from said request inputting means.

4.        The information server system according to claim 1, further comprising an intermediate device which has at least one client device thereunder, and is connected to said server device through the network, and intermediates entire data transmissions between said at least one client device and said server device, and wherein:

- 25        said intermediate device includes

schedule management means for managing schedule information representing substantially same contents as the relevance between the classifications of information

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and the respective transmission times of the information managed by said schedule management means,

information storage means for storing information provided by said information providing means in one of said at least one client device under said  
5 intermediate device, and

said request processing means for processing a request, for transmission of information, received from said at least one client device under said intermediate device, and for providing corresponding information to said at least one client device; and

said request processing means  
10 refers to said schedule management means so as to determine whether the information requested to be transmitted by said at least one client device is stored in said information storage means,

reads out, when determined that the requested information is stored in said information storage means, the requested information from said information storage  
15 means, and provides said at least one client device with the read information, without sending a request for transmission of the information to said server device through the network, and

sends the request, when determined that the request information is not stored in said information storage means, to said server device through the network, and controls  
20 said information providing means to provide the requested information.

5. The information server system according to claim 1, wherein the network is Internet.

6. An information server system which transmits information to at least one client device which has sent through a network a request for transmission of the  
25 information, said system comprising:

schedule management means for managing relevance between classifications of information and transmission times of the information;

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information providing means for referring said schedule management means, and selecting classified information corresponding to a present time, and also for providing the classified information to said at least one client device; and

information transmission means for transmitting the information selected and  
5 provided by said information providing means to said at least one client device, which has sent the request, through the network.

7. A method for providing information, in a system comprising a server device and at least one client device connected to said server device through a network, for transmitting information from said server device to said at least one client device through  
10 the network in response to a request from said at least one client device, said method comprising the steps of:

managing relevance between classifications of information and transmission times of the information in said server device;

sending a request for transmission of information through the network from said at  
15 least one client device to said server device;

selecting in said server device classified information corresponding to a present time;

transmitting the selected information from said server device to said at least one client device, which has sent a request for transmission of the information, through the  
20 network; and

outputting the transmitted information from said at least one client device.

8. A method for providing information to at least one client device which has requested transmission of the information; said method comprising the step of:

managing relevance between classifications of information and transmission times  
25 of the information; and

sending classified information corresponding to a present time to an information provider through the network.

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9. A server device which is connected to at least one client device through a network, said server device comprising:

schedule management means for managing relevance between classifications of information and transmission times of the information;

5 request receiving means for receiving a request for transmission of information from said at least one client device;

request processing means for processing the request received by said request receiving means;

information providing means for referring to said schedule management means, and  
10 selecting classified information corresponding to a present time, and for providing the selected information; and

information sending means for sending the information provided by said information providing means to a predetermined client device, through the network, whose request has been processed by said request processing means.

15 10. The server device according to claim 9, wherein:

said schedule management means further manages relevance between information representing areas and time zones of the respective areas;

said request processing means includes area determination means for determining in which area at least one client device having sent a request for transmission of information  
20 exists; and

said information providing means selects and provides classified information corresponding to a present time in a time zone of the area determined by said area determination means.

11. The server device according to claim 9, wherein said request processing  
25 means further includes counting means for counting a number of client devices which have sent a request for transmission of information or a number of client devices to which said information sending means has sent requested information, according to the

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classifications of the information.

12. The server device according to claim 9, wherein the network is Internet.

13. A server device which is connected to at least one client device through a network, and includes a memory for storing a program and data, a processor for executing  
5 the program, and a communications device connected to said processor and for sending/receiving information to/from said at least one client device, wherein said server device:

manages relevance between classifications of information and transmission times of the information in said memory;

10 receives in said communications device a request for transmission of the information sent from said at least one client device through the network;

executes, using said processor, the program stored in said memory in response to the request received by said communications device, and selects classified information corresponding to a present time; and

15 sends the information selected by said processor from said communications device to said at least one client device, which has sent the request, through the network.

14. A client device connected to a server device through a network, said client device comprising:

request inputting means for inputting a request for transmission of information to be  
20 sent from said server device, in accordance with schedule information representing relevance between classifications of information and transmission times of the information;

request sending means for sending a request for transmission of information to said server device through the network based on an input from said request inputting means;

25 information receiving means for receiving information sent from said server device through the network; and

information outputting means for outputting the information received by said

information receiving means.

15. The client device according to claim 14, wherein said request inputting means includes time setting means for setting a transmission time a request for transmission of information is sent to said server device, and inputs a request to said server device, at the  
5 transmission time set by said time setting means.

16. The client device according to claim 15, wherein said request inputting means:

further includes

information classification inputting means for inputting a classification of  
10 requested information, and  
time determination means for determining whether it is passed a transmission time of the requested information of the classification input by said information classification inputting means;

controls said request sending means to send a request for transmission of  
15 information, when said time determination means determines that it is passed the transmission time of the requested information; and

controls said time setting means to set a transmission time in which a request for transmission of information is sent, when said time determination means determines that it is not passed the transmission time of the requested information.

20 17. The client device according to claim 14, wherein the schedule information is one to be transmitted from said server device through the network.

18. The client device according to claim 14, wherein the network is Internet.

19. A client device which is connected to a server device through a network, and includes a memory for storing a program and data, a processor for executing the program,  
25 an input device and an output device both being connected to said processor, and a communications device for sending/receiving information to/from said server device, wherein said client device:

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inputs through said input device a request for information to be sent from said server device, in accordance with schedule information representing relevance between classifications of information and transmission times of the information;

sends the request input through said input device said communications device to  
5 said server device through the network;

receives in said communications device information which is sent from said server device through the network in response to the request; and

outputs the information received by said communications device from said output device.

10 20. An intermediate device which is connected to a server device through a network and has at least one client device thereunder, said intermediate device comprising:

schedule management means for managing schedule information representing substantially same contents as relevance between classifications of information and  
15 transmission times of the information managed in said server device;

information storage means for storing information provided by said server device in said at least one client device under said intermediate device; and

request processing means for processing a request, for transmission of information, sent from said at least one client device, and for providing said at least one client device  
20 with corresponding information, and

wherein said request processing means

refers to said schedule management means, and determines whether information requested from said at least one client device is stored in said information storage means,

25 reads out requested information from said information storage means and provides said at least one client device with the read information, without sending the request to said server device through the network, when determined that the requested

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information is stored in said information storage means, and

sends the request to said server device through the network, controls said server device to transmit corresponding information, and provides said at least one client device, when determined that requested information is not stored in said information  
5 storage means.

21. The intermediate device according to claim 20, wherein the network is Internet.

22. An intermediate device which is connected to a server device through a network, and includes at least one client device thereunder, a memory for storing a  
10 program and data, a processor for executing the program, and a communications device connected to said processor and for sending/receiving information to/from said at least one client device, wherein:

said intermediate device

manages in said memory schedule information representing substantially  
15 same contents as relevance between classifications of information and transmission times of the information managed in said server device, and

stores in said memory information provided from said server device to said at least one client device; and

said processor

20 refers, when received a request for transmission of information from said at least one client device, to said schedule information managed in said memory, and determines whether information corresponding to the request is stored in said memory  
provides said at least one client device which has sent the request with the information corresponding to the request, without sending the request to said server  
25 device through the network, when determined that the requested information is stored in said memory, and

sends the request to said server device through the network, controls said

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server device to transmit information corresponding to the request, and provides said at least one client device with the transmitted information, when determined that the requested information is not stored in said memory.

23. A computer readable recording medium which stores a program which makes  
5 a computer device, connected to a plurality of client devices through a network, function as:

schedule management means for managing relevance between classifications of information and transmission times of the information;

request receiving means for receiving a request, for transmission of information,  
10 sent from one of said plurality of client devices;

request processing means for processing the request received by said request receiving means;

information providing means for referring to said schedule management means, and for selecting classified information corresponding to a present time, and also for  
15 providing the selected information; and

information sending means for sending the information provided by said information providing means to the one of said plurality of client devices whose request has been processed by said request processing means through the network.

24. A computer readable recording medium which stores a program which makes  
20 a computer device, connected to a server device through a network, function as:

request inputting means for inputting a request, for transmission of information, transmitted from said server device on the network, in accordance with schedule information representing relevance between classifications of information and transmission times of the information;

25 request sending means for sending a request for transmission of information to said server device through the network based on an input from said request inputting means; information receiving means for receiving information sent from said server device

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through the network; and

information outputting means for outputting the information received by said information receiving means.

25. A computer readable recording medium storing a program which makes a computer device, which is connected to a server device through a network and has at least one client device thereunder, function as:

schedule management means for managing schedule information representing substantially same contents as relevance between classifications of information and transmission times of the information managed by said server device on the network;

10 information storage means for storing information sent from said server device in said at least one client device; and

request processing means for sending a request, for transmission of information, sent from said at least one client device, to said server device, and

wherein said request processing means

15 refers to the schedule management means, and determines whether information requested from said at least one client device is stored in said information storage means,

reads out information corresponding to the request and provides the read information to said at least one client device, without sending the request to said server device through the network, when determined that the requested information is stored in 20 said information storage means, and

sends the request to said server device through the network, and controls said information providing means to transmit the requested information, when determined that the requested information is not stored in said information storage means.

25 26. A program data signal which is embodied in a carrier wave and transmitted through a communications path, said signal including segments for making a computer device, which is connected to a plurality of terminal devices through a network, function

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as:

incentive providing means for providing a predetermined incentive to at least a part of the terminal devices which have requested a particular service to be provided;

request frequency counting means for counting a number of terminal devices which  
5 have requested a service to be provided; and

incentive modifying means for modifying contents of an incentive provided by said incentive providing means, in accordance with the number of terminal devices counted by said request frequency counting means.

27. A program data signal which is embodied in a carrier wave and transmitted  
10 through a communications path, said signal including segments for making a computer, which is connected to a server device through a network, function as:

request inputting means for inputting a request for transmission of information to be transmitted from said server device on the network, in accordance with schedule information representing relevance between classifications of information and  
15 transmission times of the information;

request sending means for sending a request, for transmission of information, to said server through the network, based on an input from said request inputting means;

information receiving means for receiving information sent from said server device through the network; and

20 information outputting means for outputting the information received by said information receiving means.

28. A program data signal which is embodied in a carrier wave and transmitted through a communications path, said signal including segments for making a computer device, which is connected to a server device through a network on the network and has at  
25 least one client device thereunder, function as:

schedule management means for managing schedule information representing substantially same contents as relevance between classifications of information and

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transmission times of the information managed by said server device on the network;

information storage means for storing information provided from said server device in said at least one client device; and

request processing means for sending a request, for transmission of information,

5 sent from said at least one client device to said server device, and

wherein said request processing means:

refers to said schedule management means, and determines whether information requested by said at least one client device is stored in said information storage means;

10 reads out the requested information from said information storage means, and provides the read information to said at least one client device, without sending the request to said server device through the network, when determined that the requested information is stored in said information storage means; and

sends the request to said server device through the network, and controls said  
15 information providing means to provide the requested information, when determined that the requested information is not stored in said information storage means.

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